1.1	CHAIRPERSON CANADY: Could we then
2	rephrase that, further analysis of existing data for
3	completion purposes?
4	DR. EDMONDSON: A rhetorical question.
5	And what if it can't be answered?
6	CHAIRPERSON CANADY: Then that decision
7	will be made.
8	DR. PIANTADOSI: I have a rhetorical
9	answer.
10	(Laughter.)
11	I am totally confident that the Agency has
12	heard the concerns and that they will make an
13	appropriate decision with the additional analyses and
14	data clean up.
15	CHAIRPERSON CANADY: Any other comments
16	regarding that amendment?
17	DR. NUWER: Well, I have a concern that
18	it's a whole unforseen set of circumstances that could
19	arise if the company gives data of a certain sort and
20	then that leads to further concerns and it sort of
21	rolls on month after month and this gets stretched out
22	for a long time without any sense of closure to it.

1 DR. ZAMORANO: Well, basically, we have said that somehow we say which patients are the ones 2 that will be the indications, but they think it should 3 be maybe stated which are the ones should not be 4 considered. For example, patients that are responding 5 to therapy, for example, it's not recommended for 6 patients that are currently responding to levodopa. 7 It's not for patients with dementia. 8 9 CHAIRPERSON CANADY: We have to be a little careful because almost all of these patients 10 were responding to levodopa, but had some relatively 11 negative effect of levodopa. 12 13 DR. ZAMORANO: Right. 14 CHAIRPERSON CANADY: So I'm not sure responsiveness, per se, is the right term. 15 16 DR. PIANTADOSI: We have criteria from the 17 protocol. There were exclusion criteria in the 18 protocol. They're not reflected though in the 19 thoughts behind these questions and maybe it would be 20 enough to point to those or state and crafted from the exclusionary criteria as contraindications. 21 22 CHAIRPERSON CANADY: Well, maybe we could

1	DR. PIANTADOSI: I would add to that also
2	that I'd be comfortable not voting on this personally,
3	that I think the Agency has heard the discussion and
4	the concern and knows what to do and I'm perfectly
5	comfortable with that if people decided that they
, 6	don't want to vote on it explicitly.
7	CHAIRPERSON CANADY: Dr. Hallett, what is
8	your pleasure, it's your amendment?
9	DR. HALLETT: I would be happy to withdraw
10	it as long as it's done.
11	(Laughter.)
12	CHAIRPERSON CANADY: Any additional
13	amendments? Dr. Zamorano?
14	DR. ZAMORANO: I think we all have the
15	concern that something like this gets approved. I
16	think tomorrow every patient with Parkinson's disease
17	is going to notify a surgeon to get bilateral
18	stimulation. It should be labeled by the sponsor in
19	some way contraindication or it's not advised in such
20	and such patients.
21	CHAIRPERSON CANADY: This is the brass
22	nuts part. You've got to say which patients.

J	say the exclusion criteria of the protocol should be
2	part of the labeling.
3	DR. MASSAQUOI: Question. Is it
4	essential that things be made a contraindication
5	versus a statement that says safety and/or
6	effectiveness has not been established in a certain
7	group?
8	CHAIRPERSON CANADY: Okay, that could be
9	done.
10	DR. MASSAQUOI: In the situation where you
11	don't know explicitly one or the other and there's not
12	an overriding
13	DR. ZAMORANO: Or it's not advisable in
14	patients without saying it's a contraindication.
15	CHAIRPERSON CANADY: Since that group
16	wasn't studied.
17	DR. ZAMORANO: Uh-huh.
18	CHAIRPERSON CANADY: We could say that
19	safety was not established in this group and include
20	the excluded population from the protocol. Is that
21	acceptable to you or not?
22	DR. ZAMORANO: My concern is mostly with
1 1 1	·

Live (Verkijs de	the patients that are currently in good that are
2	well controlled with medical treatment, those patients
3	because they will know that this exists, this
4	bilateral stimulation, they will go and try to have
5	this procedure and I think we need to provide some
6	means that it doesn't happen. And we know it will
7	happen between different colleagues, some get more
8	excited about doing this bilateral stimulation and
9	CHAIRPERSON CANADY: I think that that
10	group is excluded by the statement in the first one
11	which is only those patients who are advanced, and
12	only those patients who are not adequately controlled
13	was part of the original label. So I think we've
14	covered that group.
15	DR. ZAMORANO: Yes. I think we covered
16	it, but I don't know if we could add some second
17	CHAIRPERSON CANADY: Is there additional
18	people that you wish to include in that?
19	DR. EDMONDSON: No, I think we really do
20	need a contraindication label that's clear. The
21	exclusion criteria for the study is not, will not
22	match one to one with what we really need. For

example, patients over 75 are excluded in the study. 1 2 We probably don't want to include age contraindication or maybe we do want to say, I mean 3 it's understood that Parkinson's occur in adults 4 5 so an age limit or consideration is not 6 necessary. 7 Secondary Parkinsonism, I think using responsive Parkinsonism is an 8 levodopa important 9 point, so excluding secondary Parkinson's patient 10 would not be appropriate in the contraindication label. 11 12 CHAIRPERSON CANADY: Dr. Fessler? 13 DR. FESSLER: At this point all we really 14 know is that this has been somewhat effective in 15 patients with advanced Parkinson's who are responsive 16 to levodopa, but are now losing their responsiveness. We don't know anything else and we really can't say 17 it's contraindicated for conditions we don't know that 18 19 it's contraindicated. That has to be a medical 20 decision that has to be the doctor. DR. EDMONDSON: However, when you put it 21 in someone who is demented, quite demented -- so, you 22

1	know, I think we still need some sort of guideline.
2	CHAIRPERSON CANADY: I need your
3	recommendation.
4 , ,	DR. EDMONDSON: Number one, it is
5	contraindicated in patients with dementia. Number
6	one, that it is contraindicated in patients with
7	coagulopathies. Number three, I don't know if you
8	want to say I mean that would include folks with
9	advanced hepatopathies and other potential
10	coagulopathies. I think that's it.
11	CHAIRPERSON CANADY: A second? For that
12	amendment that it would be contraindicated in dementia
13	and in coagulopathy. Second?
14	[No second.]
15	I will entertain other amendments.
16	DR. WALKER: Can we change the wording to
17	safety and efficacy has not been evaluated and done
18	the same way.
19	CHAIRPERSON CANADY: A second for that?
20	A second for the amendment, "safety and efficacy has
21	not been demonstrated in dementia and in
22	coagulopathy."

1	DR. HALLETT: Well, coagulopathy
2	CHAIRPERSON CANADY: Just dementia? What
3	is your
4	DR. HALLETT: There are certain exclusion
5	criteria in this particular protocol. I mean
6	coagulopathy and secondary drug-induced Parkinsonism,
7	previous intracranial neurosurgical procedures, demand
8	pacemakers, substance abuse, things like that which
9	should be or could be considered exclusion criteria.
10	And then there are some other ones in
11	which we just don't have the information such as age,
. 12	so that one could say that safety and efficacy have
13	not been demonstrated for patients older than age 75
14	or perhaps some other things. But then there are
15	other situations
16	CHAIRPERSON CANADY: I need to know at
17	this point in time those things.
18	(Laughter.)
19	This is no longer general conversation.
20	DR. HALLETT: Right.
21	CHAIRPERSON CANADY: So we can say the
22	exclusion criteria of the protocol. And whatever you

	might wish to add to that or subtract from that.
2	DR. HALLETT: Okay, but I would think that
3	we could say exclusion criteria are the ones that can
4	be taken directly from the protocol.
5	CHAIRPERSON CANADY: So safety and
6	efficacy has not been demonstrated under the excluded
7	criteria. Is there a second for that amendment?
8	DR. PIANTADOSI: I second that, yes.
9	CHAIRPERSON CANADY: Conversation
10	regarding this?
11	Call for the vote then. Dr. Walker?
12	DR. WALKER: Yes.
13	CHAIRPERSON CANADY: Dr. Zamorano?
14	DR. ZAMORANO: Yes.
15	CHAIRPERSON CANADY: Dr. Hallett?
16	DR. HALLETT: Yes.
17	CHAIRPERSON CANADY: Dr. Edmondson.
18	DR. EDMONDSON: Yes.
19	DR. NUWER: Yes.
20	DR. MASSAQUOI: Yes.
21	DR. FESSLER: No.
22	DR. PIANTADOSI: Yes.

1	CHAIRPERSON CANADY: Additional
2	amendments?
3	DR. PIANTADOSI: I have a question.
4	CHAIRPERSON CANADY: Yes sir.
5	DR. PIANTADOSI: Is the panel going to
6	make any recommendations generically about safety?
7	CHAIRPERSON CANADY: If you would then so
8	amend them, yes sir. Anything you want us to say
9	needs to be said now.
10	DR. PIANTADOSI: Well, let me just raise
11	the generic concern and see if one of my clinical
12	colleagues can put it into better words. Many times
13	labeling reflects the serious adverse events with
14	approximate frequencies that they occur and I wonder
15	out loud if anybody considers them to be clinically
16	important enough that they should be put in the label
17	and that the physicians contemplating the use of the
18	device should be informed directly through the label
19	about their frequency.
20	CHAIRPERSON CANADY: I need some wording.
21	DR. HALLETT: Could I just ask a question
22	about that? For all of the other uses for DBS, has

1	that already does that type of statement exist or
2	not?
3	CHAIRPERSON CANADY: I can't answer that.
4	I don't know.
5	DR. HALLETT: For example, for the
6	indication for DBS of the thalamus for tremor, do we
7	have that type of statement in the labeling?
8	CHAIRPERSON CANADY: Dr. Witten?
9	DR. WITTEN: I will just say that in
10	general for PMA, in the label there's a description of
11	the safety issues are described, but if there is
12	some the safety issues from the study are
13	described. But if there's some particular things that
14	should be highlighted in some way, you know, those
15	would be good to note. But otherwise, just in the
16	general for any PMA
17	CHAIRPERSON CANADY: That will happen.
18	DR. WITTEN: We note safety and there's a
19	safety table in the label. But if there's any
20	concerns about what needs to be said or what to do or
21	suggestions like that, you could
22	CHAIRPERSON CANADY: Obviously,

	nemiparesis is the major one.
2	DR. PIANTADOSI: That would satisfy my
3	CHAIRPERSON CANADY: Other amendments.
4	Okay.
5	DR. ZAMORANO: I wonder if there is a way
6	this panel can introduce an amendment related to the
7	training of the physicians when to perform the
8	procedure.
9	CHAIRPERSON CANADY: What is your
10	amendment?
11	DR. ZAMORANO: I don't know how to phrase
12	it, but basically, I mean related to the training of
13	the need to be highly trained in this procedure,
14	the physician.
15	CHAIRPERSON CANADY: I think it's an issue
16	that we have that we need a specific statement as
17	to how to add the two amendments.
18	DR. ZAMORANO: It could be a
19	recommendation to the sponsor that to establish a
20	mechanism for the training or to establish a criteria.
21	CHAIRPERSON CANADY: The concern I have
22	regarding that is that it's not clear that that falls

1	within the industry's purview to establish that is the
2	concern in terms of how we go about establishing that.
3	You might want to have a statement on the labeling
4	regarding the concern that it be performed by
5	physicians who are trained specifically in this
6	procedure.
7	DR. ZAMORANO: Right.
8	CHAIRPERSON CANADY: I think that would be
9	an amendment we could make.
10	DR. ZAMORANO: Maybe it could be related
11	to the other one that we said, the potential
12	complications of this procedure is so and so and so
13	and that required a highly trained physician to
14	perform this procedure.
15	CHAIRPERSON CANADY: Should we say that we
16	would recommend specific training in this procedure be
17	made available for physicians?
18	DR. ZAMORANO: That would be a good
19	recommendation.
20	CHAIRPERSON CANADY: Would that be an
21	acceptable version of y our amendment? Is there a
22	second for that?

1	DR. HALLETT: Could you say it again once
2	more?
3	CHAIRPERSON CANADY: Specific training in
4	this procedure should be made available for
5	physicians.
6	DR. HALLETT: Could we say that specific
7	training in the procedure is recommended for
8	physicians?
9	CHAIRPERSON CANADY: Yes, we surely can.
10	DR. WALKER: I'll second that.
11	CHAIRPERSON CANADY: Second?
12	DR. WALKER: Yes.
13	CHAIRPERSON CANADY: Any more comment?
14	Vote. Dr. Walker?
15	DR. WALKER: Yes.
16	CHAIRPERSON CANADY: Dr. Zamarano?
17	DR. ZAMORANO: Yes.
18	DR. HALLETT: Yes.
19	DR. EDMONDSON: Yes.
20	DR. NUWER: Yes.
21	DR. MASSAQUOI: Yes.
22	DR. PIANTADOSI: Yes.

	CHAIRPERSON CANADY: Other comments,
2	amendments?
3	DR. MASSAQUOI: One amendment. Third from
4	the last item. Regarding the increase in duration and
5	quality of on time and decreases the duration of off
6	time without mentioning the severity of off time
7	unless I didn't
. 8	CHAIRPERSON CANADY: You wish to exclude
9	severity?
10	DR. MASSAQUOI: Yes, severity of off time.
11	CHAIRPERSON CANADY: Is there a second?
12	DR. MASSAQUOI: I just don't recall the
13	data off hand. Maybe if someone could remind me. I
14	just didn't recall that as being established that
15	during the periods when people were off that they were
16	less severe
17	DR. NUWER: I thought that was
18	established. It was part of the data that was
19	presented.
20	The severity in the off was not that much
21	different from the on before implanted.
22	DR. MASSAQUOI: Okay, fine, I'll withdraw.

1 5,aa. 5	Thank you.
2	CHAIRPERSON CANADY: You withdraw that.
3	Any other amendments?
4	Okay, now I'd like to take a vote on the
5	major motion which is approvable with conditions. The
6	conditions are the conditions that we have voted on.
7	This would also be your opportunity to make a comment
8	regarding the entire we should vote first and then
9	the reasons?
10	CHAIRPERSON CANADY: Dr. Walker?
11	DR. WALKER: I'll vote yes. Thirty
12	seconds of comment, running a multicenter clinical
13	study of 22 bright and innovative principal
14	investigators, especially neurosurgeons is probably
15	something like herding cats.
16	CHAIRPERSON CANADY: Neurosurgeons, of
17	course, take offense to this.
18	DR. WALKER: I think the sponsor did a
19	good job in this and I think that by approving this
20	today the panel is making a big contribution to what's
21	available to Parkinson's patients.
22	CHAIRPERSON CANADY: Dr. Zamarano?

1	DR. ZAMORANO: Yes, a very brief comment.
2	I think this is an excellent possibility to offer to
3	some of the patients and I think with the condition
4	that we have outlined it makes good step, the
5	approval.
6	CHAIRPERSON CANADY: Dr. Hallett.
7	DR. HALLETT: I vote yes. I think the
8	most important reason is the prolongation of the on
9	effect which gives rise to a better lifestyle for the
10	patients.
11	CHAIRPERSON CANADY: Dr. Edmondson?
12	DR. EDMONDSON: I vote yes and I'll say
13	ditto to my predecessors.
14	CHAIRPERSON CANADY: Dr. Nuwer?
15	DR. NUWER: I vote yes and add that I
16	think that the improvement int he patients' clinical
17	status outweighs the methodological flaws in the
18	matter before us.
19	CHAIRPERSON CANADY: Dr. Massaquoi?
20	DR. MASSAQUOI: I vote yes and I'll just
21	ditto and also say that it does seem that despite the
22	methodological problems, there was an incredible

1	amount of work that was done and it was headed all in
2	the right direction, I think.
3	CHAIRPERSON CANADY: Dr. Piantadosi?
4	DR. PIANTADOSI: I'll vote yes with no
5	additional comment. Thank you.
6	CHAIRPERSON CANADY: Then the motion
7	passes with conditions as outlined. I believe that's
8	the end of the meeting.
9	Any other comments the panelists would
10	like to make?
11	DR. COHEN: Yes, I'd like to make a
12	comment as a patient. I'm pleased with the outcome
13	and that I'm glad we stuck close to the data and I'm
14	glad that we approved this treatment.
15	CHAIRPERSON CANADY: Dr. Witten?
16	DR. WITTEN: I'd like to thank the panel
17	and everyone else who participated today.
18	(Applause.)
19	CHAIRPERSON CANADY: The meeting is
20	adjourned.
21	(Whereupon, at 5:39 p.m., the meeting was
22	concluded.)

CERTIFICATE

This is to certify that the foregoing transcript in the

matter of:

Neurological Devices Panel of the

Medical Devices Advisory Committee

Before:

DHHS/FDA

Date:

March 31, 2000

Place:

Rockville, MD

represents the full and complete proceedings of the aforementioned matter, as reported and reduced to typewriting.

Mufula